

IN THE CLAIMS:

Please cancel claims 1-15, all of the claims set forth in the specification of the published application, and cancel claims 1-11 as received by the PCT branch on 8/31/2001 without prejudice.

Please add new claims 12-22, as follows:

12. A method of recovering base metal from a tailings dump which includes the steps of:
- (a) aerating a surface layer of the dump by agitating or mechanically loosening the surface layer;
 - (b) providing conditions favourable for bacterial oxidation of sulphide minerals by:
 - (1) adjusting the pH of the surface layer to a level in the range of from 1.3 to 2.0, and
 - (2) adjusting the moisture content of the surface layer to a value of from 16% to 20%;
 - (c) allowing bacterial oxidation to take place for a controlled period resulting in a oxidised surface layer;
 - (d) removing the oxidised surface layer after the controlled period and adding water thereto to form a slurry;
 - (e) separating the slurry into solids and a solution; and
 - (f) recovering base metal from the solution.

13. The method according to claim 12 wherein the surface layer is aerated by ploughing the surface layer to a depth of between 0.5 to 1.0 metres.

14. The method according to claim 12 wherein the pH is adjusted by adding sulphuric acid to the surface layer.

15. The method according to claim 12 wherein the said controlled period, in step (c), is at least four weeks.

16. The method according to claims 12 wherein the oxidised surface layer is removed by mechanical means or by the use of water jets.

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17. The method according to claim 12 wherein the slurry is directed to at least one tank in which agitation of the slurry takes place.

18. The method according to claim 12 wherein base metal in sulphate form in solution is separated from the slurry.

19. The method according to claim 12 wherein step (f) is carried out using solvent extraction or ion exchange techniques.

20. The method according to claim 12 wherein said base metal is copper.

21. The method according to claim 20 wherein the tailings dump results from the grinding of copper ores followed by a flotation process.

22. A copper recovery process wherein copper ore is ground and then subjected to a flotation process which results in tailings which are transferred to a tailings pile, and wherein the tailings pile is subjected to the following:

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- a) loosening and aerating of a surface layer of the pile;
 - b) adjusting the pH of the surface layer to a value in the range of from 1.3 to 2.0;
 - c) adjusting the moisture content of the pile to lie in a range of from 16% to 20%;
 - d) allowing bacterial oxidation of at least sulphide minerals in the surface layer for a controlled period;
 - e) removing the surface layer thereafter;
 - f) mixing the surface layer with water to form a slurry which is conveyed to at least one agitation tank
 - g) separating the slurry in the tank into solids and a solution from which copper is extracted using solvent extraction or ion exchange techniques.
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IN THE ABSTRACT:

Please add the Abstract of the Disclosure as set forth on the separate accompanying sheet.